		O <sup>r</sup> \	
	Application No.	Applicant(s)	
Al di CAR Lind	09/733,841	BETTS, WILLIAM L.	
Notice of Allowability	Examiner	Art Unit	
	Emmanuel Bayard	2631	:
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course <b>THIS</b>
1. This communication is responsive to <u>RCE filed on 11/1/04.</u>			
2. The allowed claim(s) is/are 29-55.			
3. $\boxtimes$ The drawings filed on <u>01 November 2004</u> are accepted by	the Examiner.		
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority un</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application No	<del></del>	tion from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply of ENT of this application.	complying with the rec	puirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>	itted. Note the attached EXAMINER's reason(s) why the oath or declarat	S AMENDMENT or Nation is deficient.	OTICE OF
<ol> <li>CORRECTED DRAWINGS (as "replacement sheets") musical including changes required by the Notice of Draftsperson.</li> <li>hereto or 2) to Paper No./Mail Date</li> <li>including changes required by the attached Examiner's Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the</li> </ol>	on's Patent Drawing Review (PTO-S Amendment / Comment or in the O	ffice action of	back) of
<ol> <li>DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F</li> </ol>	sit of BIOLOGICAL MATERIAL m	· nust be submitted. N	lote the
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	<ol> <li>5. ☐ Notice of Informal Pa</li> <li>6. ☐ Interview Summary ( Paper No./Mail Date</li> </ol>	(PTO-413),	)-152)
<ul> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/08         Paper No./Mail Date     </li> <li>Examiner's Comment Regarding Requirement for Deposit</li> </ul>	8), 7. Examiner's Amendm	nent/Comment	
of Biological Material	<ol> <li>8.</li></ol>	nt of Reasons for Allov	vance
		Emmanuel Bayard Primary Examiner Art Unit: 2631	

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## **DETAILED ACTION**

This is in response to RCE filed on 11/1/04 in which claims 1-28 are canceled and claims 29-55 are pending. The applicant's RCE has been fully considered therefore this case is in condition for allowance. In addition the pending claims have been renumbered as 1-27 respectively.

## Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The prior arts of record fail to anticipate or render obvious the following recited features: A gain calculation element configured to calculate at least a portion of the gain applied by the DMT transmitter to each of the plurality of transmit carrier tones, the gain based on a predetermined transmit signal spectrum associated with each of the plurality of transmit carrier tones and on a power measurement of each of the received carrier tones as recited in claim 29. Wherein the DMT transmitter is further configured to apply a gain to each transmit carrier tone before transmitting, the gain applied to each tone based on a corresponding one of the plurality of carrier tone scaling signals as recited in claim 38. Calculating at least a portion of the local gain, the calculated gain based on a predefined transmit signal spectrum associated with each of the plurality of transmit carrier tones and on a power measurement of each of the received carrier tones as recited in claims 43 and 50. Adjusting the local gain applied to the at least one transmit carrier tone, the calculated gain based on a predefined transmit signal spectrum associated with each of the plurality of transmit carrier tones and on a power measurement of each of the received carrier tones as recited in claim 46.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Larsson et al U.S. patent No 6,452,987 B1 teaches a fast start-up in discrete multi-tone based communications system.

Sankaranarayanan et al U.S. Patent No 6,134,274 teaches a method and apparatus for allocating data for transmission via discrete multiple tones.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (3:PM -10:00PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571 272 3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Bayard Primary Examiner Art Unit 2631

12/1/04

EMMANUEL BAYARD